

Application No. 10/792,190
AMENDMENT A dated March 14, 2007
Reply to Office Action of January 16, 2007

REMARKS

After entry of the present Amendment, claims 1-23 are pending in the application. Claims 1-21 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention because of the phrase "significant amounts of a texture enhancing agent". Claims 1-10 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US 3,162,536 ("Kaufmann"). Claims 11 and 13-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US 3,162,536 ("Kaufmann") in view of EP 0 084 831 ("Flessner").

The Office Action also relies on Bowes & Church's Food Values of Portions Commonly Used ("Bowes"). A copy of this non-patent reference was not provided with the Office Action. Instead, a copy of a Wikipedia web page was included, which does not appear to correspond to, or even refer to, the Bowes reference. Applicants respectfully request that a copy of the Bowes reference be provided. Nonetheless, as it is Applicants' understanding that the Office Action is only relying on Bowes for the protein content of a potato flour¹, to further prosecution, Applicants still provide the following response.

Applicants have amended independent claims 1 and 12 to further define the low protein flour as a low protein wheat flour. Independent claim 1 is further

¹ Applicants do not necessarily agree that because one reference teaches a specific protein level for a sample of potato flour (*i.e.*, Bowes apparently indicates that a potato flour contains 8% protein), that all potato flours must have the same level of protein. Since different potato flours will likely have different protein levels, it seems problematic to conclude (as the Office Action has done) that because Bowes' potato flour has 8% protein, that Kaufmann's potato flour should have 8% protein. Nonetheless, since Applicants' claims now require a low protein wheat flour, they distinguish over potato flours of the cited references.

amended to clarify that the drying is effective to achieve the desired textural firmness after cooking. New dependent claims 22 and 23 have also been added to further define the low protein wheat flour as a blend of soft wheat flour and hard wheat flour. Support for these amendments can be found in Applicants' specification in at least Examples 1 and 2 on pages 10 and 11. As further discussed below, the cited references fail to disclose a pasta product or method of making thereof that uses a wheat flour with less than about 12 percent protein that also exhibits the claimed textural firmness after reconstitution without the addition of significant amounts of texture enhancing agents.

I. Section 112 Rejections

Applicants respectfully submit that the phrase "significant amounts of a texture enhancing agent" in independent claims 1, 12, and 18 is defined in the specification such that the claims are not indefinite. For example, on page 9, lines 18-31, Applicants' specification states:

For purposes of this invention, a "texture enhancing agent" is a substance (dry or liquid) that is added to the pasta dough or coated on the surface of the extruded or dried pasta to improve the textural firmness of the pasta after consumer reconstitution. Texture enhancing agents generally include, but are not limited to, any material that increases the level of protein in the dough. Examples of such texture enhancing agents include: wheat gluten, dried or liquid egg products, glyceryl monostearate, propylene glycol alginate, humectants such as sodium chloride or potassium chloride, lipase, or edible oils. For purposes of this invention, "significant amounts" with respect to the texture enhancing agents is intended to mean that less than about 0.2 percent of the textural enhancing agent is added, preferably less

than about 0.1 percent, and more preferably no textural enhancing agent is added. (Emphasis added.)

Applicants have also amended dependent claim 13 to be consistent with claim 12 from which it depends. Accordingly, Applicants respectfully request withdrawal of the rejection to claims 1-21 under Section 112, second paragraph.

II. Section 103 Rejections

The claims define pasta and a method to form such pasta that incorporates low protein wheat flour (*i.e.*, less than about 12 percent protein), but still forms a pasta product that is texturally firm (*i.e.*, about 12 to about 21 kgf) after subsequent consumer cooking. As discussed above in Section I, the claims also require that the pasta is formed without significant amounts of a textural enhancing agent commonly used in the prior art to achieve such firmness levels. The low protein wheat flour is preferably a soft wheat or a blend of a soft and hard wheat (so long as the blend has an average protein level below about 12 percent). With the claimed formulation, Applicants have discovered that a specific drying profile affects the final textural properties of the reconstituted pasta. Example I of Applicants' specification clearly demonstrates the effect of two different drying profiles on the textural firmness of low protein pasta that also does not have significant amounts of a textural enhancing agent. In this Example, a standard drying profile (control) resulted in pasta that exhibited unacceptable firmness levels after reconstitution of 9.4 kgf. On the other hand, with the same low protein pasta dough formulation without significant amounts of texture enhancing agents, the claimed drying profiles resulted in pasta that exhibited acceptable firmness of 17.4 kgf after reconstitution.

A. Claims 1-10 and 12

The Office Action has rejected claims 1-10 and 12 as being obvious in view of Kaufmann. However, this reference does not disclose a wheat flour, any drying conditions, or the textural firmness of the pasta after reconstitution. Kaufmann only discusses the use of starchy flours (manioc tubers, peanut, chestnut, or potato), extruding temperatures, and a chewing test of the dough in the "uncooked" state.

The claims now define that the pasta be formed with a wheat flour. Kaufmann only discloses non-grain, starchy flours. Due to functionality differences, Kaufmann's disclosure of starchy flours is clearly not a suggestion or disclosure of grain-type, wheat flours. In fact, Kaufmann clearly teaches away from using wheat flours by stating "[w]hile starchy flours . . . possess a high food value, because of their low protein content they cannot be used like wheat flour and the like for making conventional alimentary paste food products such as spaghetti." (Col. 1, lines 14-19). The Office Action also relies on the supplied translation of Flessner to suggest the use of a soft wheat flour. However, as discussed further below, Flessner includes significant amounts of a textural enhancing agent, which is opposite the claimed pasta and method.

The Office Action also suggests that the claimed drying profile would be obtainable through routine experimentation based on the disclosure of Kaufmann. Kaufmann, however, only generically states that the dough is dried without a specific discussion of any drying conditions or the effect those conditions have on product firmness after reconstitution (*see, e.g.*, Col. 2, lines 28-30). Section 2144.05 (II)(B) of the Manual of Patent Examining Procedure states that only a "result-effective" variable

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can be optimized by routine experimentation, and that the particular parameter "must first be recognized as a result-effect variable . . . before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." As defined in that section, a "result-effective" variable is one that achieves a recognized result. The Office Action has provided no basis that the cited references or one of ordinary skill in the art would recognize drying profiles (*i.e.*, temperature and humidity) of pasta dough as affecting the textural firmness of pasta after reconstitution much less that drying profiles could provide a pasta of the desired firmness without the use of significant amounts of texture enhancing agents. The Office Action, therefore, cannot properly dismiss the claimed drying profile in the method of claims 1-10 as being obvious over Kaufmann through routine experimentation, especially when Example I clearly illustrates the unexpected improvement in firmness of reconstituted pasta due to the claimed drying profiles.

Accordingly, Kaufmann fails to disclose or suggest all the features of claims 1-10 and 12.

B. Claims 11 and 13-21

The Office Action has also rejected claims 11 and 13-21 as being obvious over Kaufmann in view of Flessner.² The discussion above regarding Kaufmann applies equally to claims 11 and 13-21 and will not be repeated for this rejection. According to the supplied translation, Flessner does not overcome the deficiencies of Kaufmann discussed above. Flessner also does not provide any support that drying profiles are a

² Flessner is a foreign language reference, and the Office Action has supplied a translation of this reference. The supplied translation of Flessner appears to be computer generated via an Internet website. For purposes of this response, Applicants respond only to the supplied English translation.

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results-effective variable that can be optimized through routine experimentation. Similar to Kaufmann, Flessner only generically discloses drying the extruded final product to a certain final dampness.

Flessner also teaches away from the claimed pasta and method of making because it's formulation includes a significant amount of a texture enhancing agent as defined in Applicants' specification. In particular, the formulation of Flessner includes 2 to 5 parts (3-5%) of common salt (sodium chloride) and 1 to 2.5 parts (1.5-2.8%) of an emulsifying agent (glycerol monostearate). Both of these ingredients are texture enhancing agents as defined by Applicants' specification and are clearly in "significant amounts" as also defined by Applicants' specification (*see page 9, lines 18-31*). Applicants claimed method and pasta, on the other hand, do not include significant amounts of a texture enhancing agent.

Accordingly, neither Kaufmann, Flessner, nor a combination thereof, disclose or suggest the claimed pasta and method. In light of the above discussion, Applicants respectfully request reconsideration and withdrawal of the rejections to claims 1-21 under Section 103(a).

III. Conclusion

Reconsideration and allowance of claims 1-23 are respectfully requested.

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The Commissioner is hereby authorized to charge any additional fees which may be required with respect to this communication, or credit any overpayment, to Deposit Account No. 06-1135.

Respectfully submitted,
FITCH, EVEN, TABIN & FLANNERY

Dated: March 14, 2007

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